

REMARKS

I. The Objections Under Section 112

In the Official Action, the Examiner objected to Claim 9, under Section 112 because she believed that the claim required clarification and because of questions about the compound polyiminodiacetamine. In particular, the Examiner believed it unclear whether "modifying the water solubility of the polymer...by attaching the hydrophobic group of the compound containing the hydrophobic group to the water soluble polymer to produce a water insoluble interaction product" was a step in the process of part of the liquid composition.

With this Amendment, the Applicant has amended Claim 9 to overcome these objections. In particular, the Examiner should note that the Applicant added language in Claim 9 to clarify the addition of the hydrophobic group to the water soluble polymer is in fact a step in the *in situ* formation of the protective film.

The Applicant confirms that searching for the term polyiminodiacetamine on Google does in fact return no hits. Unfortunately, Applicant's attorneys are unsure whether it is a new or existing compound. However, the composition of polyiminodiacetamine is shown on page 27, lines 10-12 of the original application thereby providing support for the claimed term.

For the reasons set forth above, the Applicant submits that the claim, as amended, overcomes the Examiner's objections based on Section 112.

II. The Substantive Rejections

The Examiner is thanked for the withdrawal of the previous rejections.

In the current Official Action, the Examiner rejected Claim 9 under Section 103 as

being unpatentable in view of Alwattari et al., U.S. Patent No. 5,874,072 or Rechelbacher et al., U.S. Patent No. 5,849,280. Additionally, the Examiner rejected Claim 9 under Section 103 as being unpatentable over the Applicants' admitted prior art (shown in Pomerantz et al., U.S. Patent No. 5,081,158) that discloses "hydrophobe modified hydroxy propyl cellulose water soluble polymer in view of Alwattari and Rechelbacher.

Applicant believes Examiner's rejection is inappropriate, and that the Applicant's claims distinguish his invention over the art of record. Applicant believes that an ordinary person skilled in the art would not look to the alternatives discussed in Alwattari or Rechelbacher to combine with the Pomerantz reference, since the film forming compounds in Alwattari and Rechelbacher are intended to be used in a dry environment, rather than the Applicant's claimed wetted or moist environment. More importantly, there would be no reason to combine the hydroxyethyl cellulose of Alwattari or Rechelbacher with Pomerantz, as Pomerantz states that hydroxyethyl cellulose was unsuitable for use as a substitute for hydroxypropyl cellulose (column 2, lines 27-30), thereby teaching away from the combination.

A. Alwattari, U.S. Patent No. 5,874,072

Alwattari relates to mascara and eye makeup compositions. Although the Examiner is correct that Alwattari does disclose using a variety of natural film forming polymers, including hydroxyethyl cellulose and hydroxypropyl cellulose, Alwattari does not disclose or suggest modifying the water solubility of the polymer from the Applicant's group by attaching the hydrophobic group of the compound containing the hydrophobic group to the water soluble polymer to produce a water insoluble interaction product. Further, Alwattari does not suggest

that the polymers are equivalent when a hydrophobic group has been added.

It is also noteworthy that Alwattari's compounds are used exclusively in connection with the production of compositions designed to be used externally, on the face or eyelashes. Importantly, the face or eyelashes on which Alwattari's component is used is are normally dry environments that do not present the difficulties of forming a film *in situ* that are presented in the Applicant's claimed wet or moist environment.

Nothing in Alwattari discloses or suggests that the composition disclosed therein would be capable of forming a film that adheres to a wet or moist body tissue, that is capable of being used on a mucosal surface, such as an intra-oral surface, such as the Applicant's composition. Additionally, Alwattari does not disclose or suggest that the natural film forming polymers are interchangeable or equivalent in a wetted or moist environment.

B. Rechelbacher, U.S. Patent 5,849,280

Rechelbacher relates to the composition of hair conditioner. Although the Examiner is correct that Rechelbacher, like Alwattari, does disclose the use of organic film forming polymers, including hydroxyethyl cellulose and hydroxypropyl cellulose, the uses Rechelbacher provides are exclusively external, and is used in what is normally a dry environment. Nothing in Rechelbacher discloses or suggests that the composition disclosed therein would be capable of forming a film that adheres to a wet or moist body tissue, such as the Applicant's composition. In addition, Rechelbacher, like Alwattari, does not suggest that hydroxyethyl cellulose, hydroxypropyl cellulose, or the other natural film forming polymers are interchangeable or equivalent in a wetted or moist environment.

C. *Pomerantz, U.S. Patent No. 5,081,158*

Pomerantz comprises the “admitted prior art” that discloses the use of hydroxypropyl cellulose, and relates to the creation of a protective film using hydroxypropyl cellulose on wet or moist body tissue. Although Pomerantz does teach the formation of a film-forming composition, and this composition taught by Pomerantz uses the compound hydroxypropyl cellulose, it is quite different than that claimed by the Applicant. In particular, Pomerantz discloses that “Closely related alkyl or hydroxyalkyl cellulose, such as methylcellulose, hydroxyethyl cellulose, and hydroxybutyl cellulose *are not suitable as substitutes* for [hydroxypropyl cellulose].” (Column 2, lines 27-30) (emphasis added). As such, Pomerantz teaches away from the use of the Applicant’s hydroxyethyl cellulose. Therefore, it would not be obvious to combine Pomerantz’s composition with either Rechelbacher or Alwattari’s disclosure of hydroxyethyl cellulose, since Pomerantz states that hydroxyethyl cellulose is “unsuitable”.

Additionally, it should be noted that Pomerantz requires a very specific esterification process to provide the compound a degree of insolubility. By contrast, the applicant provides a different reaction to accomplish addition of the hydrophobic group, one which does not necessarily involve esterification.

Finally, the variation of uses of film forming polymers between the cosmetic products in Alwattari and Rechelbacher and the internal medical uses of Pomerantz and the Applicant renders the Applicant’s work to be non-obvious, since one looking to create a substance for forming a film in situ in a wet or moist environment would not look to the teachings of references designed to work in dry environments.

IV. Conclusion

For the foregoing reasons, the Applicant submits that his claims, as amended, patentably distinguish the Applicant's invention from the art of record. Re-examination and re-consideration, culminating in the allowance of all the claim, is respectfully requested.

It is respectfully requested that the Examiner so find and issue a Notice of Allowance in due course.

V. Request for Appropriate Extension of Time

If necessary, Applicant requests that this Response be considered a request for an extension of time for a time appropriate for the response to be timely filed. Applicant requests that any required fees needed beyond those submitted with this Response be charged to the account of E. Victor Indiano, Deposit Account Number 50-1590.

Respectfully submitted,



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cc: Mr. Tony Moravec

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